Rapid Response Teams in Hospitals Increase Patient Safety

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Many hospitals are now familiar with the concept of rapid response teams (RRTs), one of six initiatives that comprised the Institute for Healthcare Improvement's (IHI's) "100,000 Lives Campaign." The idea is simple: any health care worker can bypass the typical chain of command and call what is essentially a medical "SWAT team" to quickly assess a patient and intervene when lifesaving care may be needed.[1] Unlike the traditional "code" team, the RRT intervenes before the patient experiences respiratory or cardiac arrest. The results have been impressive, with reductions in cardiac arrests, deaths, and length of hospital stay.[2]

The University of Pittsburgh Medical Center (UPMC) Shadyside and Children's Hospital appears to be the first facility in the U.S. to have invited patients and families to call for a RRT to address unresolved concerns about their safety and health.[3–4] Upon admission, patients and family members are invited to pick up any phone in the hospital to report a Condition H (for "help") if they:

- fear something is seriously wrong and have expressed their concerns without validating or recognizing its potential importance.
- experience a communication failure with the staff.
- become confused about the patient's care.
- need to know where to voice concerns.
- feel something about the patient's condition is "just not right."

Help is available around the clock. The phone call goes to the hospital operator, who pages the RRT. The team arrives at the patient's bedside within minutes, listens to the patient's or family member's concerns, assesses the patient, and responds with medical care or further investigation, as needed. At Shadyside, RRT members are chosen on the basis of their clinical skills as well as on their ability to interact well with people. The whole effort can fail if a team member says, for example, "This had better be good, because I was busy."[4]

Shadyside created Condition H after a staff member heard Sorrel King, a prominent patient safety advocate, tell the compelling story of medical errors that caused the death of her 18-month-old daughter, Josie, while receiving treatment for burns from a bathtub accident. Josie had been healing well, but she died two days before her planned discharge. The hospital staff failed to recognize that the child had become seriously dehydrated despite frequent pleas by the mother that Josie was listless and extremely thirsty—and that something was wrong.[3–5] Inspired by Sorrel King's presentation, a Shadyside staff member contacted her. Together they devised a plan that would allow patients and family members to bring their critical concerns to the attention of an emergency medical team, similar to calling 911 for help.

When the staff at Shadyside first introduced the idea of Condition H, many feared that too many calls would be made for non-urgent reasons, such as cold meals or uncomfortable pillows.[4] The results of a pilot test, however, were positive, and the intervention was spread throughout the hospital.

Placing a picture of Josie King on the cover of the patient brochure that describes Condition H (also called the Josie King Call Line) and showing patients a video about this tragedy, when time permits, also acts as a deterrent to non-urgent calls. When patients see that the helpline is named after a child who lost her life because of medical errors, they are less likely to use the line to complain about food or other minor annoyances.[4]

Sorrel King had no doubt that access to a RRT would have saved her daughter's life, because the errors that caused her death were easily correctable.[4] Similarly, we have no doubt that a RRT could have reduced harm resulting from other life-threatening medication errors.

One mistake that helped spark the modern patient safety movement—an overdose of cyclophosphamide administered to *Boston Globe* reporter Betsy Lehman in 1994—brought widespread public attention to medical errors.[6–8] Mrs. Lehman received an entire course of chemotherapy each day for four consecutive days at Dana–Farber Cancer Center. Both she and her husband repeatedly stated that something was not right after the first dose, but their concerns were dismissed as the expected toxicity of the chemotherapy. Sadly, on the day she was to be discharged, Betsy even phoned a friend and left a message:

"I'm feeling very frightened, very upset. I don't know what's wrong, but something's wrong."[6] She died an hour later.

If either Betsy or her husband had been able to call a RRT when she first experienced symptoms of the overdose, would she have survived? Deploying a different group of health practitioners, whose primary roles were to listen, be objective, and be responsive, might have resulted in a better outcome if the error had been caught when the patient and her husband first expressed concerns.

Between July 2005 and March 2006, Shadyside received 20 calls, mostly from patients.[5] All calls were judged to have been appropriately initiated, and the hospital considers each call a learning experience.[3] In fact, it is recognized that even though something interfered with communication between the patient, family, and staff, individuals should not be blamed. Condition H is considered an additional opportunity to step in before a tragedy occurs. However, Shadyside also believes that the program has caused staff members to ramp up their communication with patients. Patients say they feel

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much safer knowing they can get immediate attention if they feel they need it.[4]

UPMC has been expanding Condition H to other facilities within its network, and other hospitals in the U.S. are gearing up to empower patients to call a response team. This intervention may truly be one of the most important ways that health care systems can make patients an equal partner in their care and safety.

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